DECISION MEMO
Cut Coulee Trail Bridge Replacement

USDA Forest Service
Shoshone National Forest
North Zone/Wapiti Ranger District

Project Identification: N0120
Park County, Wyoming T49N, R106, Sec. 6

Decision

I have reviewed the environmental analysis and my decision is to implement the proposed action to replace the existing Cut Coulee Trail Bridge. The proposed action for this site-specific project falls under Category 1, in Section 31.2 of the Forest Service Handbook 1909.15 – Environmental Policy and Procedures Handbook – Construction and Reconstruction of Trails. Repair and maintenance of trails are categorically excluded under Section 31.1 (4) of the Handbook. This category, which does not generally require documentation in a project file or a decision memo, is one established by the Chief of the Forest Service. Since we are completing a decision memo for action regarding trail construction and reconstruction, at our discretion, we have included descriptions of trail maintenance.

The existing conditions, particularly that of the Cut Coulee Bridge, present a major risk to horses and pack animals on the Ishawooa Trail #768. Without the replacement of the existing bridge, existing safety concerns and problems with the bridge would continue. The proposed action would correct the deficiencies and hazards with the Cut Coulee Bridge identified by engineers as not being up to standard. The bridge replacement involves removing the existing hazardous bridge at Cut Coulee and replacing it with a new bridge.

The decision rationale for implementing the proposed action is based on the following issues and how the decision would address the issue:

Recreation/Wilderness Facilities and Experiences

How to implement the proposal with the least impact to the wilderness resource and be the least apparent to the user?

Health and Safety

How to provide for the removal of hazards and provide a safe experience?

Resource Management

How to maintain trails/bridges used by horses and pack stock for resource protection (soil, water, wilderness)?

The decision and actions implemented need to be the most expeditious, cost efficient methods available to address concerns in terms of health and safety and wilderness management.

Engineering design was based on data in compliance with the American Association of Sate Highway and Transportation Officials Standard Specifications for Highway Bridges, 1996; National Forest Products Association National Design Standards (NDS) for Wood Construction, 1991; and USDA Forest Service EM 7700-8 Timber Bridge Design, Construction, Inspection and Maintenance.

The reconstruction of the Cut Coulee Bridge and the described trail work is necessary to correct a situation hazardous to foot and stock travel and to protect the wilderness resource. Reconstruction will be completed to standards as determined in the minimum tool analysis. Project implementation will result in a safer bridge built to standards, but still meet wilderness experience criteria for a trail that provides a high degree of challenge, self-reliance, and risk. It is not intended or anticipated that visitor use numbers, campsite impacts, or visitor encounters will increase to a measurable degree along the trail corridor because of this action.

Implementation of this proposed action is subject to a minimum tool analysis of structures, techniques, and methods used in the Washakie Wilderness. Other considerations and constraints such as budget and personnel, project funding, changing priorities, impacts of fire season, etc. affect the scheduling and completion of the project. The Cut Coulee Bridge replacement is a high priority because of the safety problems with the bridge. The bridge replacement will be completed in the summer of 2003 in a relatively short period to minimize effects**.** Because of the distance to the job and the short operating season (due to the climate and elevation of the site), these factors may cause the actual time required for the bridge work to vary slightly, but it should be completed in a 30-day time window during July or extending into August, based on conditions.

Proposed Action

The Cut Coulee Bridge is approximately eight miles from the Ishawooa Trailhead on the Ishawooa Trail. The Cut Coulee Bridge is a critical component of this mainline trail in the Washakie Wilderness and is a key component of maintaining a wilderness transportation system, as directed by the Forest Plan.

Project implementation will begin the summer of 2003. The trail and Cut Coulee Bridge are used by hikers, horses, and pack stock as a primary access to the Thorofare region of the Teton Wilderness and Yellowstone National Park.

Several alternatives for the project were considered, including: 1) no action, 2) the proposed action, to replace the Cut Coulee Bridge, and 3) close the trail.

Because of safety concerns, the bridge replacement is a high priority for 2003. Field review indicated that a bridge at Cut Coulee is essential, as there is no way across this deeply incised rocky drainage and the location for the proposed action is the only feasible location. The minimum tool analysis will address the construction, techniques, and methods.

I have chosen to implement the following elements of the Proposed Action to address the purpose and need for the project:

Summary of Proposed Action for the Cut Coulee Bridge Replacement[1]

The work crew will consist of a packer and three trail crewmembers. They will camp (NW1/4, NW1/4, Sec. 7 T49 N, R106 W**)** in proximity to the bridge for up to 30 days in order to complete the bridge reconstruction. This project will be limited in time and area. The actions are site-specific and the site has the existing bridge and trail already present. The work is scheduled for early to mid-July 2003 to early to mid-August. Overnight stock use will be incidental and kept to a minimum by utilizing mostly day trips in and out. If necessary (being caught too late in the day to pack out, storms, etc.), stock may be kept near camp behind a temporary drift fence. The activity is no more disturbing than regular pack strings/campers using the trail or camping.

The bridge will be about 50 feet in total length, including the approaches to the bridge. Components for the bridge will be pressure treated wood with steel joists. Each steel joist shall be designed and fabricated in three sections with field bolted splice connections. Each joist section shall weigh less than 300 pounds. The splice connections, bracing, load bearing capacity shall be designed by a registered professional structural engineer. The splices shall not reduce the full load carrying capacity of the joists.

The bridge components will be flown by helicopter to a spot near, but outside, the wilderness boundary (SW1/4 Sec. 36, T50N, R106W). A two-day period is anticipated for the helicopter work. From the wilderness boundary, all supplies for the bridge will be packed in with stock. Use of the rock drill is anticipated to be limited to ten days total to complete bridge installation.

[1] Complete Engineering Plans and Drawings, Design Data and Design Criteria are located at the Wapiti Ranger District, 203A Yellowstone Ave., Cody, WY 82414

Joists, bracing, and all miscellaneous steel components, except bolts and nuts, shall be painted with paring system number 4 as specified in section 563 of the Forest Service specifications for construction of roads and bridges. Paint color shall be dark brown.

All timber shall be Douglas-fir/larch and shall be pressure treated.

Primary bridge components are the abutments, joists, running/deck plank, rock bins, and handrail. Specifics are:

- Deck width will be 6'6', with 6' clearance between rails
- 2"x12" running plank; 3"x12x6'6" deck plank.
- Handrails posts are 5'x6'x6"; spaced 5'' apart for a total of six spaces. Handrails will be anchored to rock bin.
- 37' overall steel joist length

Some excavation/removal of volcanic rock will be required to fit the bridge on-site.

Materials from the replaced bridge will be packed out.

To ensure public safety during the reconstruction work, the trail may be closed intermittently to all public use. A news release and radio notification will be issued two weeks prior to project implementation. The trailhead will be posted with reconstruction schedules and updates. Signs and or spotters will be placed along the trail in both directions immediately before entering the active work areas. As needed, individuals will be posted along the trail to stop traffic until it is safe to let people proceed. Forest Service personnel will have radios and be in contact with each other to inform work crews of parties traveling on the trail and the need to possibly suspend operations.

Operational or procedural requirements for project design and implementation to minimize any environmental effects or for site enhancement include:

- A minimum tool analysis will be completed to guide implementation (methods and techniques) of the project in the wilderness area (see minimum tool analysis in project file).
- The on-site project supervisor may order an immediate temporary suspension of all human activity when, in his/her judgment, such action is necessary to prevent confrontation or conflict between humans and grizzly bears.
- Construct bridges to only the standard necessary to accommodate the specified class of user (foot, horse, and pack stock).
- A cultural resource survey will be completed and no change to the historic nature of the area will result.
- Leave No Trace camping techniques will be used by the trail reconstruction crew to minimize the impacts to existing campsites and new use areas.
- The use of stock by crews on the Ishawooa trail and campsites will be limited as much as possible to minimize the formation of new impacted sites. Most pack trips will be day-use.
- Best Management Practices for use of treated wood in aquatic environments shall be followed for field treatment of wood.
- Processed feed meeting weed free certification will be used for horse/pack stock.
- Bear food storage orders and other techniques for camping in bear country will be followed to prevent human/bear conflicts.
- As needed, spotters (individuals) will be posted along the trail to stop traffic until it is safe to let people proceed during critical times during construction of the bridge, when the bridge is not passable, and periods of high use on the trail. When the trail is open, spotters will be posted to inform and notify of trail users that work is in progress and that they may encounter potential hazards from the ongoing work (helicopter, rock drills, and other activities). Radios will be used to facilitate communications between a spotter and the trail crew to mange for safety along the trail during project implementation.

Purpose of and Need for Action

The need for the project is tiered to goals of the Shoshone National Forest Land and Resource Management Plan, primarily:

Goal

Manage designated wilderness under the Wilderness Act of 1964 to protect and perpetuate essentially natural biophysical conditions and to provide for wilderness recreation opportunities.

Applicable General Direction and Standards and Guidelines

The following shows the applicable direction from the Forest Plan. Additional direction is found in the Washakie Wilderness Plan.

- Construct or reconstruct trails only when needed to meet objectives of the wilderness transportation system
- Construct bridges to only the standard necessary to accommodate the specified class of user. Construct bridges only where no safe opportunity exists to cross a stream or gorge during periods of normal stream flow.
- A safety hazard is a physical condition of a trail, which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user. It is not a condition that is easily identifiable and normally encountered for the type or location of the trail involved. Examples are found on page III-197 of the plan.
- Use corduroy and/or puncheon treads across bogs where no safe and feasible bypass opportunity exists.

Purpose

The project is to improve the health and safety concerns currently present on-site concerning the Cut Coulee Bridge. The purpose and need of the bridge reconstruction is to maintain the wilderness transportation system as directed by the Forest Plan and meet these project goals: 1) reduce hazards and improve safety conditions for wilderness trail users on foot, horse and/or pack stock, 2) improve the bridge design or location to maintain the effectiveness of the short- and long-term maintenance on this bridge, 3) improve the visitor's experience on the trail and provide for primitive recreation opportunities.

The bridge will be constructed to only the standard necessary to accommodate the specified class of user, which is foot, horse and pack stock. The existing, constructed bridge must be replaced, as no safe opportunity exists to cross the Cut Coulee without a bridge. Compliance with Forest Plan direction would be obtained by:

- Construct or reconstruct trails only when needed to meet objectives of the wilderness transportation system; the purpose of the project is to maintain a mainline trail on the wilderness transportation system.
- Construct bridge(s) only to the standard necessary to safely accommodate the specified class of user, in this case, large and numerous pack trains and/or foot traffic (hikers and backpackers). The purpose of the project is to construct a bridge per Forest Plan direction, where no safe opportunity exists to cross a stream or gorge during periods of normal stream flow. This is the case at the Cut Coulee Bridge site.
- A safety hazard is a physical condition of a trail, which may cause injury, is unusual or unexpected, and not readily identifiable by the trail user. This is the case for the Cut Coulee Bridge, where a safety hazard is present due to the deteriorated condition of the existing bridge. The purpose is to replace the existing bridge due to the structure's age and rotten condition that poses a safety hazard and risk of injury or death.

As identified earlier, several alternatives to the proposed action were considered. No other actions or alternatives were identified that would meet the need. If no action were taken, a satisfactory solution to meet the need for the trail and bridge would not be met. If the Cut Coulee Bridge were removed and not replaced, it would render the trail useless, as a bridge is the only way across and the opportunity to

provide for the wilderness transportation system would be lost. No feasible options besides replacing the existing bridge were identified during field reviews.

Reasons for Categorically Excluding the Proposed Action

The proposed action falls under Category 1, in Section 32 of the Forest Service Handbook 1909.15 – Environmental Policy and Procedures Handbook – Construction and Reconstruction of Trails. Based on internal and external scoping, field reviews, specialist's input and past experience, and project design/mitigation measures, the effects of implementing this action will be of limited context and intensity and will result in little or no environmental effects to either the physical or biological components of the environment.

Forest Plan Direction/Findings Required by Other Laws

Replacing an existing bridge is consistent with laws (Wilderness Act), regulations, and policy, as well as standards and guidelines in the Shoshone National Forest Land and Resource Management Plan (LRMP). The management area is 8C, where the primary management direction is to provide for semi-primitive wilderness opportunities. This decision is in accordance with the Washakie Wilderness Plan and other applicable federal regulations and laws. A minimum tool analysis was completed and approved.

This decision was coordinated with the Forest archaeologist and the Wyoming State Historic Preservation Office (SHPO). In a letter from the SHPO (dated 5/24/02) to Region 2 of the Forest Service, if a cultural resource survey is completed and no sites are found then it is not necessary to wait for a concurrence letter from SHPO before the project can proceed. No sites were found in the bridge project area; therefore, concurrence can be assumed for the purposes of Section 106 compliance the project can proceed.

Scoping and Public Involvement

This decision is being distributed to interested and potential affected parties, including those who responded to the scoping letter or expressed an interest. The scoping statement was mailed April 26, 2001 for a 30-day public comment period. At this time, it was posted on the Forest's web page and has remained on the web for public viewing for nearly a year. It was mailed to the county commissioners, state agencies, Indian Tribes, conservation and environmental groups, radio stations, newspapers, and private individuals. The Wyoming Game and Fish Department identified no terrestrial or aquatic concerns and the State Historic Preservation Officer indicated, "Provided the USFS follows the procedures required by federal law and established in the regulations, we have no objections to the project."

The concerns that were identified from the scoping process and are the issues that were identified to help focus the decision-making process are stated on page 1.

Finding of No Extraordinary Circumstances

Under the Forest Service Handbook definition, extraordinary circumstances exist, only when *conditions* associated with the proposed action are identified "as potentially having effects which may significantly affect the environment." Scoping was conducted to identify any conditions associated with a normally excluded action as potentially having effects, which may significantly affect the environment.

Extraordinary circumstances include, but are not limited to, steep slopes or highly erosive soils, threatened and endangered species or their critical habitat, wetlands and flood plains, wetlands, or municipal watersheds, inventoried roadless areas, Congressionally designated areas (such as wilderness, wilderness study areas, or National Recreation Areas), Research Natural Areas, or Native American religious or cultural sites, archaeological sites, or historic properties or areas. These are summarized in the table below to describe the situation for extraordinary circumstances and the effects the project would or would not have.

Determinations for extraordinary circumstances were reviewed in the context of the Forest Service Handbook (1909.15 chpt. 30.3-30.5) and definition and the court decision below[2]. Extraordinary circumstances exist, or are "present" only when *conditions* associated with the proposed action are identified "as potentially having effects which may significantly affect the environment."

Extraordinary Circumstances	**Conditions that may lead to a finding of extraordinary circumstances (Yes or No). If needed, the discussions of *conditions* that may lead to a finding of extraordinary circumstances are discussed in greater detail following the table.**
a. Steep slopes or highly erosive soils	Yes. Steep slopes or highly erosive soils are present due to the mountain setting and Absaroka volcanics soil; however, *conditions* that may lead to a finding of extraordinary circumstances do not exist since the proposed action would relocate sections of the trail with erosion problems to a better location. Resource values will be enhanced and protected as a result of the project, by correcting erosion problems occurring on the existing trail. The new trail segments will be designed with erosion control structures (dips, cross drains) to reduce the erosion potential.
b. Threatened and endangered species or their critical habitat (Attach concurrence from fisheries/wildlife biologist and botanist as needed)	Yes, discussed below. A Biological Assessment for Proposed and Listed Species and a Biological Evaluation for R-2 Sensitive Species was completed.
c. Flood plains, wetlands, or municipal watersheds	No. Flood plains, wetlands, or municipal watersheds are present; however, *conditions* that may lead to a finding of extraordinary circumstances do not exist. Engineers considered the 100-year flood level (226 cfs) in the bridge engineering design. Wetlands or municipal watersheds are not present.
d. Congressionally designated areas, such as wilderness, wilderness study areas, or National Recreation Areas.	Yes. This trail reconstruction and bridge replacement work occurs in the Washakie Wilderness; this proposal is not expected to reduce values associated with Wilderness. Proposed work is not expected to cause any large increase in visitor use numbers or impacts. The intent of the project is to provide a safe experience with a more "untrammeled" character. The project complies with the Wilderness Act and the Washakie Wilderness Management Plan. Therefore, *conditions* that may lead to effects from the project on Congressionally designated areas and Wilderness areas do not exist.

[2] The United States District Court for the District of Utah recently reviewed the provisions of the FSH related to categorical exclusions in Utah Environmental Congress v. U.S. Forest Service, Case No. 2:01-CV-00390B. In a Memorandum Opinion and Order issued June 19, 2001, the court found the above interpretation of the FSH to be reasonable. Specifically, the court found that the phrase "presence of" referred to *conditions* that may lead to a finding of extraordinary circumstances, not to the phrase "extraordinary circumstances."

Extraordinary Circumstances	Conditions that may lead to a finding of extraordinary circumstances (Yes or No). If needed, the discussions of *conditions* that may lead to a finding of extraordinary circumstances are discussed in greater detail following the table.
e. Inventoried roadless areas.	No. None present; therefore, no effects from the project on inventoried roadless areas.
f. Research Natural Areas	No. None present; therefore, no effects from the project on Research Natural Areas.
g. Native American religious or cultural sites, archeological sites, or historic properties or areas.	No. None present as determined by the Forest Archaeologist.

Conditions that may lead to a finding of extraordinary circumstances are discussed in greater detail in the following:

Threatened and Endangered Species

I have concluded that the project would have no effect on any endangered or threatened species known or suspected to occur in the project influence zone; therefore no conditions that may lead to a finding of extraordinary circumstances exists. This is based on the biological evaluation process followed by the North Zone Wildlife Biologist that concluded: *"It is my determination that the proposed action will have "no effect" on any proposed or listed species known or suspected to occur in the Cut Coulee bridge area. I have also concluded that this proposed action would have "no effect" on any Region 2 sensitive species known or suspected to occur in the Cut Coulee area, or on any Forest Plan management indicator species (MIS) that are known or suspected to occur in the Ishawooa area."* The wildlife documentation for the analysis/evaluation is located in the project file.

Summary

An evaluation of potential effects to extraordinary circumstances was completed. This analysis indicated that no extraordinary circumstances would be adversely affected. I have reviewed the proposal and determined that no significant effects would occur from its implementation. The effects of the actions, as determined through scoping, are not highly controversial and are similar to other actions that have been implemented in the area. There were no comments received in response to the scoping; the assumption is that general agreement and support for this project exist.

Trail/bridge rehabilitation and hazard reduction to improve human health and safety on mainline trails are common, ordinary and necessary actions. The effects on the human environment are not highly uncertain or involve unique risks. The Forest Service has been maintaining and reconstructing bridges and trails for years with predictable results. The methods and techniques used for implementation are neither new nor experimental. Current management in the area includes trail maintenance, monitoring of campsite impacts and social encounters, outfitter/guide administration, protecting wilderness values, fire management and resource protection. Reasonable foreseeable actions in the trail corridor include a continuation of these ongoing management actions, including a three to four year trail reconstruction and realignment project for the 17- mile Ishawooa Trail.

The bridge replacement action is not related to any actions that would result in significant cumulative impacts when viewed with ongoing and reasonably foreseeable actions. The project does not represent a decision in principle about future considerations and does not violate federal, state, or local laws or requirements imposed for protection of the environment. Implementation of this project does not necessitate the need for any future actions other than annual maintenance of the improvements and maintaining the wilderness transportation system. Because the bridge is a key link in the trail system, any future actions pertaining to the trail are dependent upon the implementation of this project and providing a

safe and passable bridge. No significant effects on the physical, biological, economic or social elements of the human environment were identified.

Implementation and Contacts

This decision can be implemented immediately and is not subject to appeal pursuant to 36 CFR 215.8 (a) (4). In order to ensure safety for employees and the public and to protect infrastructure/facilities, this project would begin the summer of 2003.

For further information on this decision or project implementation, contact Trampus Barhaug, Backcountry Trails, Thad Harper, Recreation/Wilderness, or Marty Sharp, NEPA Coordinator, 203A Yellowstone Ave., Cody, Wyoming 82414 or telephone 307-527-6921.

/s/ Brent L. Larson *6/10/03*

Brent L. Larson **Date**
District Ranger